

# GEOL 392/792: GEOLOGY AND EARTH SCIENCE SEMINAR

## FALL 2024

### **Course Information:**

Class Hours: Thursdays\*, 4:30 – 5:45 pm

Class Location: Exploratory Hall, Room 1309 and via Zoom

Instructor: Dr. Brittany Hupp

Contact Information: bhupp@gmu.edu

Office Hours: Mondays, 11 am to 12 pm or by appointment, Exploratory Hall 3454

\*Note: Two seminars will be jointly hosted with the Climate Dynamics seminar and occur at a different time (see schedule). These seminars will be recorded for your viewing if you are not able to attend during the alternative time.

### **Course Description**

Capstone experience that includes discussion of scientific articles and attending seminars.

Seminars presented by outside experts, faculty, and students.

**Class Text:** None.

### **Prerequisites**

None.

### **Student Learning Objectives**

Upon successful completion of this course, students will be able to:

1. Dissect a scientific presentation to identify and summarize key findings, motivation for the study, implications of the study results for a given subdiscipline of geology, and the methods employed.
2. Construct follow-up questions to probe further into a given research topic presented by a scientist.

### **Course Structure**

Geoscientists covering a wide range of subdisciplines have been invited to give 45-50 minute public talks on their current research in their area of expertise. Students will attend these seminar presentations to gain exposure to the breadth of cutting-edge research being conducted in the geosciences and gain experience asking questions in a seminar setting.

### **Grading**

The course grade is dependent on two key assignment types:

**1. Seminar reflections:** Following each seminar, students will need to submit a ~2 paragraph summary of the presentation to Blackboard covering the research question the speaker was trying to solve, what methods and research approaches were employed, key findings, and the implications of these findings in relation to their original research question. You may also comment on aspects of the talk you found to be clear and interesting, as well as remaining questions you may have. A seminar reflection example has been uploaded to Blackboard for

your reference. A quality reflection must be submitted to earn full points. Collectively, these reflections account for 80% of your total grade.

**2. In-seminar questions.** In addition to the seminar reflection, you must also ask a total of (at least) five questions throughout the semester during the Q&A portion of the seminars. By asking questions, you are building confidence in your ability to interact with other professional geoscientists. Collectively, these questions account for the remaining 20% of your total course grade.

Assignment Type	%
Seminar Reflections (n = 13)	80
In-Seminar Questions (n = 5)	20

***Final Grade Scale***

A+ = 97 – 100%	B+ = 87 – 89%	C+ = 77 – 79%	D = 60 – 69%
A = 93 – 96%	B = 83 – 86%	C = 73 – 76%	F = 0 – 59%
A- = 90 – 92%	B- = 80 – 82%	C- = 70 – 72%	

***Course Policies***

Attendance: **Attendance at all schedule talks is required. Students may attend class either in-person or via zoom, however in-person attendance is encouraged.** If you are unable to attend a seminar occurring at an alternative time, you will need to watch the recording and submit a reflection.

Expectations for time spent outside of class: Time outside of class should be used to complete seminar reflections.

Use of technology: Access to a working computer with a stable internet connection is required for course work done outside of class. During class, please be respectful of our time together and do not engage in activities that are unrelated to class. Cell phones should be muted and used for emergencies only.

Names and Pronouns: I will gladly honor your request to address you by your preferred name or gender pronoun. Please advise me of this preference early in the semester so that I may make appropriate changes.

Late Policy: All reflections are due to Blackboard at the start of the following week’s seminar unless an alternative arrangement has been made. In general, each student is allowed one “freebie” extension of 3 days for reading quiz per semester. Beyond the freebie extension, late work will not be accepted. If there are circumstances that prevent you from turning in an assignment on time, please contact me before an assignment is late so that we may establish an alternative timeline.

Communication Plan: Email is the best way to get in touch with me. If you send me an email, I will respond within 2 business days. Please note, I do my best not to read or respond to emails past 6 pm. I am also reachable in-person before/after class and during office hours. If you would

like to meet at an alternative time in person or via zoom, feel free to reach out and we can work together to find a different time to meet.

### ***Course Schedule***

*Speaker: L=Live; V=Virtual*

Aug. 29<sup>th</sup> (L) – Geology Faculty Lightning Talks

Sept. 5<sup>th</sup> (L) – Ben Kligman, Smithsonian Institute, Vertebrate Paleontology

Sept. 12<sup>th</sup> (V) – Patrick Fulton, Cornell University, Geothermal Energy & Geophysics

Sept. 18<sup>th</sup> (V) – TBD

\*Sept. 25<sup>th</sup> (V) – Vivien Gornitz, Lamont Doherty Earth Observatory, Sea Level Rise & Ice

Oct. 3<sup>rd</sup> (V) – Mattia Pistone, University of Georgia, Continental Drilling

Oct. 10<sup>th</sup> (V) – Brian Jicha, Univ. of Wisconsin-Madison, Geochronology

Oct. 17<sup>th</sup> (L) – Elizabeth Sibert, Woods Hole Ocean. Inst., Paleoecology

Oct. 24<sup>th</sup> (L) – Bruce Campbell, Smithsonian Air & Space Museum, Venus Geology

Oct. 31<sup>st</sup> (L) – Kimberly Foecke, GMU Anthropology, Hominid Ecology/Geochemistry

\*Nov. 6<sup>th</sup> (L) – Bärbel Hönlisch, Lamont Doherty Earth Observatory, Paleoclimate

Nov. 14<sup>th</sup> (V) – Yihang Fang, Washington Univ. in St. Louis, Mineralogy

Nov. 21<sup>st</sup> (L) – Alexandra Villa, MARUM, Astrochronology & Paleooceanography

Nov. 28<sup>th</sup> – NO SEMINAR, Thanksgiving Break

Dec. 5<sup>th</sup> – (L) Sumit Mishra, Univ. Nacional Autónoma de Mexico, Metamorphism & Tectonism

***\*indicates a seminar with an alternative time and place***

### **Mason Policy Guidelines**

These university and class policies are important to understand:

#### ***Disability Accommodations***

Disability Services at George Mason University is committed to upholding the letter and spirit of the laws that ensure equal treatment of people with disabilities. Under the administration of University Life, Disability Services implements and coordinates reasonable accommodations and disability-related services that afford equal access to university programs and activities. Students can begin the registration process with Disability Services at any time during their enrollment at George Mason University. If you are seeking accommodations, please visit <http://ds.gmu.edu/> for detailed information about the Disability Services registration process. Disability Services is located in Student Union Building I (SUB I), Suite 2500.

Email: [ods@gmu.edu](mailto:ods@gmu.edu) | Phone: (703) 993-2474

Office of Disability Services: <http://ods.gmu.edu>

#### ***Academic Integrity***

The integrity of the University community is affected by the individual choices made by each of us. Mason has an Honor Code with clear guidelines regarding academic integrity. Three fundamental and simple principles to follow at all times are that: (1) all work submitted be your own; (2) when using the work or ideas of others, including fellow students, give full credit through accurate citations; and (3) if you are uncertain about the ground rules on a particular assignment, ask for clarification. No grade is important enough to justify academic misconduct. Plagiarism means using the exact words, opinions, or factual information from another person without giving the person credit. Writers give credit through accepted documentation styles, such

as parenthetical citation, footnotes, or endnotes. Paraphrased material must also be cited, using the appropriate format for this class. A simple listing of books or articles is not sufficient. Plagiarism is the equivalent of intellectual robbery and cannot be tolerated in the academic setting. If you have any doubts about what constitutes plagiarism, please see me.

If only your name appears on an assignment, your professor has the right to expect that you have done the work yourself, fully and independently. Mason is an Honor Code university; please see the Office for Academic Integrity for a full description of the code and the honor committee process. The principle of academic integrity is taken very seriously, and violations are treated gravely. What does academic integrity mean in this course? Essentially this: when you are responsible for a task, you will perform that task. When you rely on someone else's work in an aspect of the performance of that task, you will give full credit in the proper, accepted form. Another aspect of academic integrity is the free play of ideas. Vigorous discussion and debate are encouraged in this course, with the firm expectation that all aspects of the class will be conducted with civility and respect for differing ideas, perspectives, and traditions. When in doubt (of any kind) please ask for guidance and clarification.

### ***Diversity and Inclusion***

George Mason University promotes a living and learning environment for outstanding growth and productivity among its students, faculty and staff. Through its curriculum, programs, policies, procedures, services and resources, Mason strives to maintain a quality environment for work, study and personal growth.

An emphasis upon diversity and inclusion throughout the campus community is essential to achieve these goals. Diversity is broadly defined to include such characteristics as, but not limited to, race, ethnicity, gender, religion, age, disability, and sexual orientation. Diversity also entails different viewpoints, philosophies, and perspectives. Attention to these aspects of diversity will help promote a culture of inclusion and belonging, and an environment where diverse opinions, backgrounds and practices have the opportunity to be voiced, heard and respected.

The reflection of Mason's commitment to diversity and inclusion goes beyond policies and procedures to focus on behavior at the individual, group and organizational level. The implementation of this commitment to diversity and inclusion is found in all settings, including individual work units and groups, student organizations and groups, and classroom settings; it is also found with the delivery of services and activities, including, but not limited to, curriculum, teaching, events, advising, research, service, and community outreach.

Acknowledging that the attainment of diversity and inclusion are dynamic and continuous processes, and that the larger societal setting has an evolving socio-cultural understanding of diversity and inclusion, Mason seeks to continuously improve its environment. To this end, the University promotes continuous monitoring and self-assessment regarding diversity. The aim is to incorporate diversity and inclusion within the philosophies and actions of the individual, group and organization, and to make improvements as needed.

### ***Sexual Harassment, Sexual Misconduct, and Interpersonal Violence***

Notice of mandatory reporting of sexual or interpersonal misconduct: As a faculty member, I am designated as a “Non-Confidential Employee,” and must report all disclosures of sexual assault, sexual harassment, interpersonal violence, stalking, sexual exploitation, complicity, and retaliation to Mason’s Title IX Coordinator per University Policy 1202. If you wish to speak with someone confidentially, please contact one of Mason’s confidential resources, such as Student Support and Advocacy Center (SSAC) at 703-380-1434 or Counseling and Psychological Services (CAPS) at 703-993-2380. You may also seek assistance or support measures from Mason’s Title IX Coordinator by calling 703-993-8730 or emailing [titleix@gmu.edu](mailto:titleix@gmu.edu).

***Privacy***

Students must use their MasonLive email account to receive important University information, including messages related to this class. Please see <http://masonlive.gmu.edu> for more information.

*\*\*\* Note: I reserve the right to make changes to this syllabus as needed.*